

and the first or second light chain variable domain;

- (b) expressing in the host cell a second polypeptide comprising a second heavy chain variable domain, the first or the second light chain variable domain, and a second multimerization domain, wherein a second binding domain is formed by the second heavy chain variable domain and the first or second light chain variable domain, and wherein the first and second binding domains bind different antigens;
- (c) allowing the first and second polypeptides to dimerize by interaction of the first and second multimerization domains to form a bispecific antibody; and
- (d) recovering the bispecific antibody from the host cell.

13. A bispecific antibody comprising a first polypeptide and a second polypeptide, the bispecific antibody comprising:

- (a) the first polypeptide which comprises a first heavy chain variable domain, a first or second light chain variable domain, and a first multimerization domain, wherein the first and second light chain variable domains have at least 80% amino acid sequence identity, and wherein a first binding domain is formed by the first heavy chain variable domain and the first or second light chain variable domain;
- (b) the second polypeptide which comprises a second heavy chain variable domain, the first or the second light chain variable domain, and a second multimerization domain, wherein a second binding domain is formed by the second heavy chain variable domain and the first or second light chain variable domain, and wherein the first and second binding domains bind different antigens;
- (c) the first and second polypeptides dimerize by interaction of the first and second multimerization domains to form a bispecific antibody.

polypeptide or the nucleic acid encoding the second polypeptide, or both, has been altered from

the original nucleic acid to encode the multimerization domain or a portion thereof.

16. The bispecific antibody of claim 14, wherein the multimerization domains of the first and second polypeptide interact at an amino acid side chain protuberance of one of the first and second polypeptides and an amino acid side chain cavity of the other polypeptide.

17. The bispecific antibody of claim 16 wherein at least one of the protuberance and cavity is generated by an alteration in which a naturally occurring amino acid is imported into the first or second polypeptide.

18. A composition comprising the bispecific antibody of claim 13 and a carrier.

31. The bispecific antibody of claim 13 wherein the antibody is anti-Ob-R/anti-HER3.

33. The composition according to claim 18, wherein the bispecific antibody is anti-Ob-R/anti-HER3.

34. The bispecific antibody of claim 13, wherein the first and second light chain variable domains have at least 90% amino acid sequence identity.

35. The bispecific antibody of claim 13, wherein the first and second light chain variable domains have at least 95% amino acid sequence identity.

36. The bispecific antibody of claim 13, wherein the first and second light chain

variable domains of the bispecific antibody of claim 35, wherein the first and second light chain

variable domains have at least 99% amino acid sequence identity.

38. The bispecific antibody of claim 13, wherein the first and second light chain variable domains have identical amino acid sequences.